

Serial No. 09/871,223Docket No.: 53924US010**Amendments to the Claims**

A detailed list of all claims under examination is set out below. The list reflects the Examiner's renumbering of misnumbered claim 28 in the July 15, 2003 Office action. Please amend claims 84 – 92 as shown below:

Claims 1 – 20 (cancelled).

21. (original): A method of attaching a component to a web of material comprising filtration material, the method comprising the steps of:
- providing a web comprising a layer of filtration material, the web having first and second major surfaces and an opening provided through it;
 - providing a component that comprises a component base portion and a deformable extension member that extends from the base to a tip;
 - inserting the extension member tip first through the opening in the web material and contacting a surface of the component base portion against the first major surface of the web material with the extension member extending through the opening; and then
 - deforming the extension member back toward the component base portion so that at least a surface of the extension member abuts against the second major surface of the web material and, along with the contact of the surface of the component base portion and the first major surface of the web material, clamps the component in fluid-tight relationship to the web material.
22. (original): The method of claim 21, wherein the step of providing web material comprises the provision of a multi-layer web material comprising at least one layer of filtration material.
23. (original): The method of claim 21, wherein the step of providing a component includes loading the component onto a die of a cooperating punch and die system and supporting at least a portion of the component base portion by an anvil portion of the die.

Serial No. 09/871,223Docket No.: 53924US010

24. (original): The method of claim 23, wherein the step of inserting the extension member of the component through the opening of the web material is conducted after the component is loaded on the die and includes moving the web material and die relative to one another until a surface of the component base portion abuts the first major surface of the web material.

25. (original): The method of claim 23, wherein the step of deforming the extension member of the component back toward the component base portion comprises advancing a punch assembly relative to the web material after the component is inserted in position and deforming the extension member by contact of the extension member with the advancing punch assembly, whereby the punch assembly bends a deformed portion of the extension member relative to a non-deformed portion of the extension member so that its tip is moved closer to the second major surface of the web material.

26. (previously presented): The method of claim 25, wherein the step of deforming the extension member of the component back toward the component base portion further comprises a second deforming step for bending the deformed portion of the extension member into a first portion that extends toward the web material and a second portion of the deformed portion that extends for a distance over the second surface of the web material.

27. (original): The method of claim 25, wherein the step of deforming the extension member of the component back toward the component base portion is conducted by selectively advancing inner and outer punches of the punch assembly so that an initial deformation is performed by advancing the inner punch to define a first bend between the deformed and non-deformed portions of the extension member while the tip of the extension member is moved toward the second major surface of the web material, and a second deformation is performed by advancing the outer punch relative to a stationary inner punch after the initial deformation so as to move the tip of the extension member closer to the second major surface of the web

Serial No. 09/871,223Docket No.: 53924US010

material and to abut a surface of the extension member against the second major surface of the web material.

28. (original): The method of claim 27, wherein the second deformation also produces a second bend between a first portion of the deformed portion that extends toward the web material and a second portion of the deformed portion that extends for a distance over the second surface of the web material.

29. (original): The method of claim 21, wherein the step of deforming the extension member back toward the component base portion includes controlling the deformation so that the surface of the extension member that abuts against the second major surface of the web material and the surface of the component base portion that contacts the first major surface of the web material are closer to each other than the thickness of the web material so as to compress the web material and thereby facilitate clamping of the component in fluid-tight relationship to the web material.

30. (original): The method of claim 21, further including a step of providing a seal enhancing substance between at least one of the interface between the surface of the extension member and the second major surface of the web material and the interface between the surface of the component base portion and the first major surface of the web material so as to facilitate making a fluid-tight relationship of the component to the web material.

31. (original): The method of claim 21, wherein the web material comprises a mask body of a respiratory mask, the opening is provided through the mask body, and the component is attached to the mask body.

32. (original): The method of claim 21, wherein the step of deforming the extension member back toward the component base portion is conducted as a cold forming process.

Serial No. 09/871,223Docket No.: 53924US010

33. (original): The method of claim 21, wherein the step of deforming the extension member back toward the component base portion is conducted as a thermal forming process including a step of introducing a sufficient quantity of heat to the extension member of the component prior to the deforming step so as to permit the extension member to be deformed under process conditions that would otherwise not be suitable to perform the deforming step.

34. (original): A method of making a respiratory mask, wherein a component is attached to a mask body, the method comprising the steps of:

providing a mask body comprising a layer of filtration material, the mask body having first and second major surfaces and an opening provided through it;

providing a component that comprises a component base portion and a deformable extension member that extends from the base to a tip;

inserting the extension member tip first through the opening in the mask body and

contacting a surface of the component base portion against the first major surface of the mask body with the extension member extending through the opening; and then

deforming the extension member back toward the component base portion so that at least a surface of the extension member abuts against the second major surface of the mask body and, along with the contact of the surface of the component base portion and the first major surface of the mask body, clamps the component in fluid-tight relationship to the mask body.

35. (original): The method of claim 34, further including a step of molding a piece of web material comprising at least one layer of filtration material into a shaped mask body for a respiratory mask of a shape that will create an open volume about at least a part of a wearer's face.

36. (original): The method of claim 35, wherein the molding step is conducted prior to attaching the component to the mask body.

37. (original): The method of claim 35, wherein the component comprises at least a part of an exhalation valve that is attached to the molded mask body.

Serial No. 09/871,223Docket No.: 53924US010

38. (original): The method of claim 34, further including a step of converting web material that comprises at least one layer of filtration material into a foldable respiratory mask that can be folded into a flat state and unfolded to form a shape that will create an open volume about at least a part of a wearer's face.

39. (original): The method of claim 34, wherein the step of deforming the extension member back toward the component base portion is conducted as a cold forming process.

40. (original): The method of claim 34, wherein the step of deforming the extension member back toward the component base portion is conducted as a thermal forming process including a step of introducing a sufficient quantity of heat to the extension member of the component prior to the deforming step so as to permit the extension member to be deformed under process conditions that would otherwise not be suitable to perform the deforming step.

41. (original): An inline method of making plural foldable respiratory masks that can be folded into a flat state and unfolded to form a shape that will create an open volume about at least a part of a wearer's face, the method including the steps of providing a web material comprising a layer of filtration material, performing a number of sequential forming operations for converting the web material into a series of foldable respiratory masks, and attaching a component to each respiratory mask, the method of attaching each one of plural components to a plurality of respiratory masks comprising the steps of:

providing an opening through a mask body from a first major surface to a second major surface thereof;

providing a component comprising a component base portion and a deformable extension member that extends from the base to a tip;

inserting the extension member of the component, tip first, through an opening in the mask body and contacting a surface of the component base portion against the first

Serial No. 09/871,223Docket No.: 53924US010

major surface of the mask body with the extension member extending through the opening; and then

deforming the extension member back toward the component base portion so that at least a surface of the extension member abuts against the second major surface of the mask body and, along with the contact of the surface of the component base portion and the first major surface of the mask body, clamps the component in fluid-tight relationship to the mask body.

42. (original): The method of claim 41, wherein the step of deforming the extension member back toward the component base portion is conducted as a cold forming process.

43. (original): The method of claim 42, wherein the step of deforming the extension member back toward the component base portion is conducted as a thermal forming process including a step of introducing a sufficient quantity of heat to the extension member of the component prior to the deforming step so as to permit the extension member to be deformed under process conditions that would otherwise not be suitable to perform the deforming step.

Claims 44 – 65 (cancelled).

66. (previously presented): A method of attaching a component to a web of material comprising filtration material, the method comprising:

- a. providing a web of material comprising a layer of filtration material and having first and second major surfaces and an aperture;
- b. providing a component comprising a base portion and a deformable extension member that extends from the base portion to a tip;
- c. inserting the tip through the aperture; and
- d. deforming the extension member so as to make an effective seal between the component and the web of material.

Serial No. 09/871,223Docket No.: 53924US010

67. (previously presented): The method of claim 66, wherein the component is clamped in fluid-tight relationship to the filtration material.

68. (previously presented): The method of claim 66, wherein the extension member is deformed by contact with a forming punch and die, whereby a deformed portion of the extension member is bent relative to a non-deformed portion of the extension member.

69. (previously presented): The method of claim 66, wherein the extension member is deformed by cold forming.

70. (previously presented): The method of claim 66, wherein the extension member is deformed by thermal forming.

71. (previously presented): A method of making a respiratory mask, wherein a component is attached to a mask body, the method comprising:


- a. providing a mask body comprising a layer of filtration material and having an aperture therein;
- b. providing a component comprising a base portion and a deformable extension member that extends from the base portion to a tip;
- c. inserting the tip through the aperture; and
- d. deforming the extension member so as to make an effective seal between the component and mask body.

72. (previously presented): The method of claim 71, wherein the component comprises an exhalation valve.

73. (previously presented): A method of attaching a component to a web of material comprising filtration material, the method comprising:

- a. providing a web of material comprising a layer of filtration material and having first and second major surfaces and an aperture;

Serial No. 09/871,223Docket No.: 53924US010

- 
- b. providing a component comprising a base portion and a deformable extension member that extends from the base portion to a tip;
 - c. inserting the tip through the aperture; and
 - d. deforming the extension member so that a surface portion of the base portion contacts the first major surface and a surface portion of the extension member contacts the second major surface.

74. (previously presented): The method of claim 73, wherein the extension member is deformed radially outwardly.

75. (previously presented): The method of claim 73, wherein a portion of the extension member is deformed toward the base portion.

76. (previously presented): The method of claim 73, wherein a portion of the extension member is deformed in a reverse bend.

77. (previously presented): The method of claim 73, wherein the component has a gripping feature extending into the thickness of the filtration material to prevent rotation of the component relative to the filtration material.

78. (previously presented): The method of claim 73, further comprising applying adhesive between the component and the filtration material to prevent rotation of the component relative to the filtration material.

79. (previously presented): The method of claim 73, wherein the component is clamped in fluid-tight relationship to the filtration material.

80. (previously presented): The method of claim 73, wherein the extension member is deformed by cold forming.

81. (previously presented): The method of claim 73, wherein the extension member is deformed by thermal forming.

Serial No. 09/871,223Docket No.: 53924US010

82. (previously presented): The method of claim 73, wherein the component comprises an exhalation valve.

83. (previously presented): A method of making a respiratory mask, wherein a component is attached to a mask body, the method comprising:

- a. providing a mask body comprising a layer of filtration material and having an aperture therein;
- b. providing a component comprising a base portion and a deformable extension member that extends from the base portion to a tip;
- c. inserting the tip through the aperture; and
- d. deforming the extension member so that a surface portion of the base portion contacts the first major surface and a surface portion of the extension member contacts the second major surface.

84. (currently amended): The method of claim ~~[[84]]~~ 83, wherein the extension member is deformed radially outwardly.

85. (currently amended): The method of claim ~~[[84]]~~ 83, wherein a portion of the extension member is deformed toward the base portion.

86. (currently amended): The method of claim ~~[[84]]~~ 83, wherein a portion of the extension member is deformed in a reverse bend.

87. (currently amended): The method of claim ~~[[84]]~~ 83, wherein the component has a gripping feature extending into the thickness of the filtration material to prevent rotation of the component relative to the filtration material.

88. (currently amended): The method of claim ~~[[84]]~~ 83, further comprising applying adhesive between the component and the filtration material to prevent rotation of the component relative to the filtration material.

Serial No. 09/871,223Docket No.: 53924US010

89. (currently amended): The method of claim [[84]] 83, wherein the component is clamped in fluid-tight relationship to the filtration material.

90. (currently amended): The method of claim [[84]] 83, wherein the extension member is deformed by cold forming.

91. (currently amended): The method of claim [[84]] 83, wherein the extension member is deformed by thermal forming.

92. (currently amended): The method of claim [[84]] 83, wherein the component comprises an exhalation valve.
